

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3008-B 16th Avenue West  
Seattle, WA 98119  
FAX: (206) 283-5044

April 22, 1992

Gerald Thompson, Project Leader  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Dear Mr. Thompson:

The following the results of the analyses of the sample submitted on April 10, 1992 from Project 7238, Small Tank Solids, PO #M-24134.

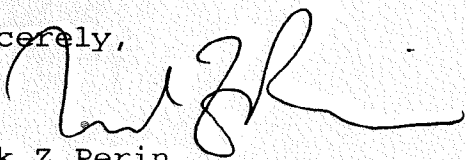
Test results indicate the presence of the following elements:

Chromium	0.16%
Copper	0.01%
Nickel	0.01%
Iron	1.3%
Fluoride	0.56%

It appears the material is a mixture of both the stainless steel scale and the ammonium bifluoride you suspected.

We appreciate this opportunity to be of service to you on this project. If you have any questions regarding this material, or if you just want to discuss any aspect of your projects, please do not hesitate to contact me.

Sincerely,

  
Mark Z Perin  
Chemist

MZP/dp

Enclosures

4 - m2p - A  
9:05

9:05

Send Report To: Alaskan Copper Works  
Company  
P.O. Box 3546  
Address  
Seattle WA 98124  
City, State, Zip  
(206) 623-5800  
Phone #

Contact Gerald Thompson

Date 4-10-92

PURCHASE ORDER #

## Small TANK Solids

M-24134

### PROJECT LOCATION

James G. Jones

3200 6<sup>th</sup> Ave. South

### SAMPLE DISPOSAL INFORM.

☐ Dispose after 30 days  
☒ Return Samples  
☐ Call for Instructions

Date/Time  
Sampled

Type of Sample

# of  
Jars

Lab  
Sample #

### Analyses Requested

m-24134

4/9/92 14:00

Grab

1

28555

$$(NH_3 \cdot H_2O)$$

~~Suspect N/A~~

Ammonium. By F/Verile

Scale from 00 annealing  
of stainless steel

Distinguish between these 2 possibilities

Stainless steel scale

Time

Relinquished by

David C. Lee

Geoff Thompson

Alaskan Copper

4/10/92

8 45

Received by:

*John E. Pugh*

James Bryn

Friedman & Bou

4/60/92

845

Relinquished by:

Received by:

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**INVOICE # 92ACU0422-1**

April 22, 1992

Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Re: Billing for the analyses of the environmental sample  
submitted on April 10, 1992 from Project 7238, Small  
Tank Solids, PO #M-24134 and reported to Gerald  
Thompson, Project Leader.

1 grab sample analyzed for chemical identification @ \$60 per sample	\$ 60.00
Amount Due .....	\$ 60.00